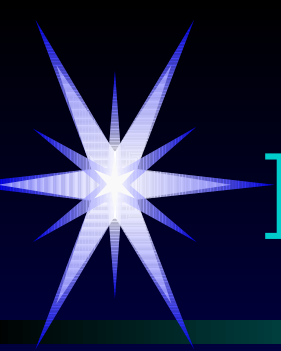


# Contraception

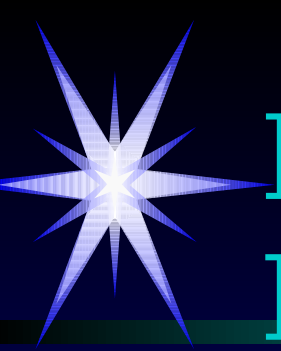
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Susan C. Brunsell, MD  
Department of Family  
Medicine  
Georgetown University



# Natural Family Planning

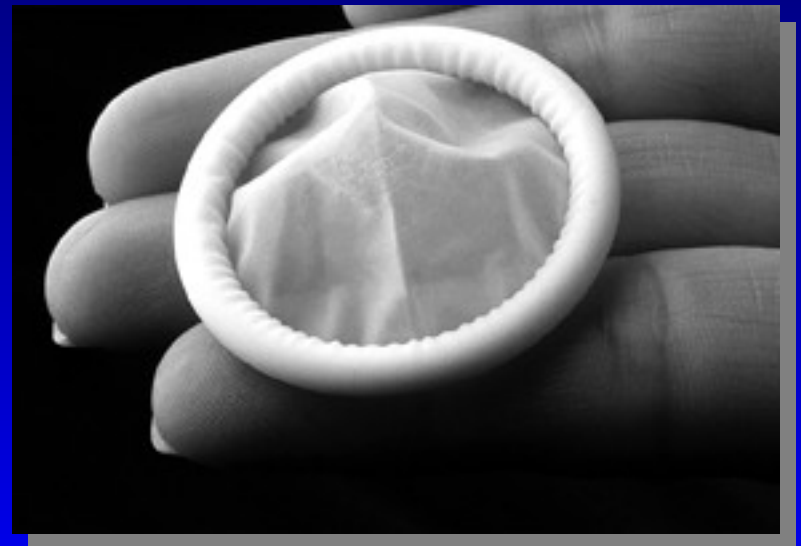
- Determine ovulation by:
  - calendar method
  - ovulation method
  - basal body temperature
  - symptothermal
- Formal training is strongly encouraged
- Regular, predictable cycles not required

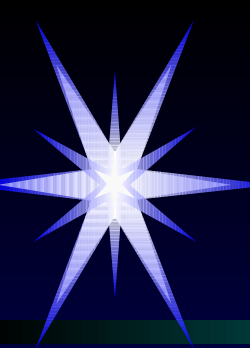


# Lactational Amenorrhea Method

- TEMPORARY method if:
  - Breast milk is sole means of nutrition
  - Menses have not returned
  - Infant is <6 mos old
- Schedule appointment at 4-6 months postpartum to discuss contraception
- Have back-up contraception planned

# Condoms





# Condoms

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- Counsel RE: appropriate use
  - Women should buy their own condoms
  - ▢ Avoid oil-based lubricants
  - ▢ Be gentle!
  - ▢ Natural membrane condoms do not protect against STDs
  - ▢ Store in cool dry place



# Condoms

- Allergy
  - 17% healthcare workers have latex allergy
    - ▢ use polyurethane condom
    - ▢ use natural membrane condom w/ latex condom
- ▢ What if condom breaks?
  - ▢ insert spermicide
  - ▢ consider emergency contraception
- ▢ Spermicide: ? Increased HIV transmission?

# Diaphragm



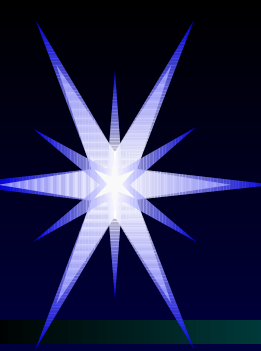


# Diaphragm

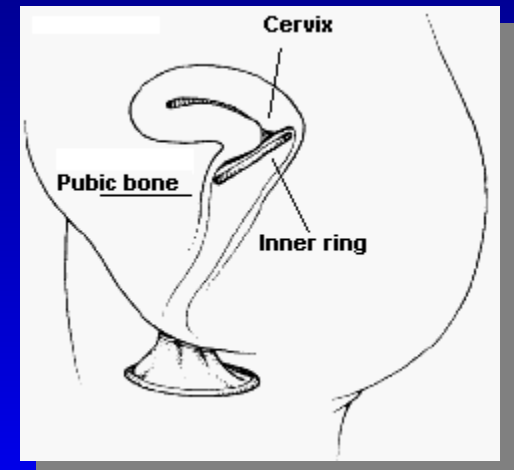
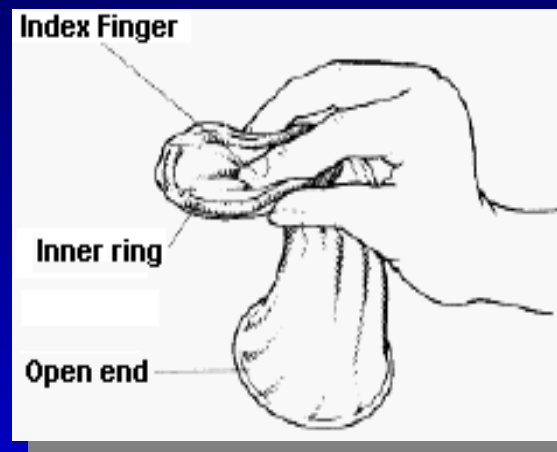
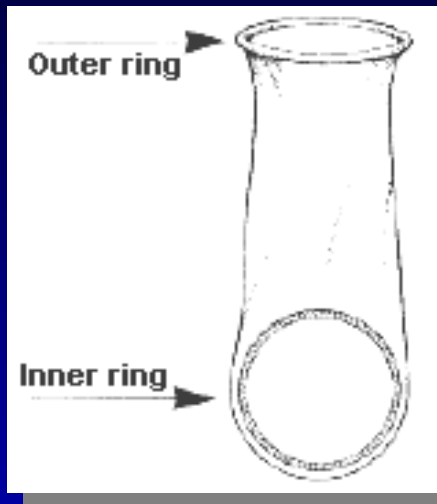
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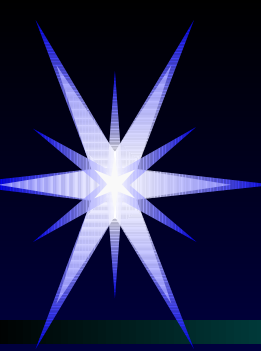
- Increased risk of UTIs
  - alteration in vaginal flora and mechanical effect
    - ▢ void after intercourse
    - ▢ consider suppressive antibiotics
- ▢ Avoid oil-based lubricants
- ▢ Cervical Cap and Sponge
- ▢ Lea's Shield





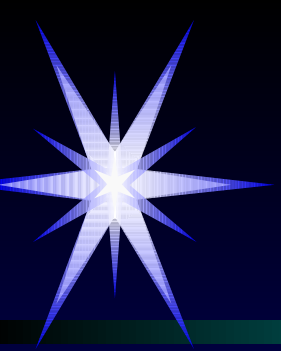
# Female Condom: “Reality”





# Female Condom

- ❑ Can insert up to 8 hours prior to intercourse
- ❑ Do not use with condom
- ❑ Can use spermicide, but not necessary
- ❑ Remove immediately after intercourse
- ❑ Do not reuse

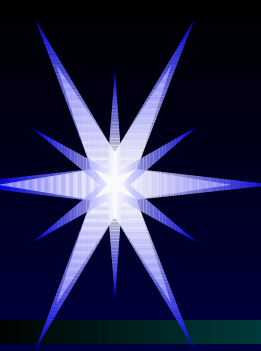


## EMERGENCY CONTRACEPTION



**USE WITHIN 3 DAYS  
OF OPENING**

Emergency contraception can prevent pregnancy for 72 hours after unprotected sex.  
For more information visit [www.gskpharm.com](http://www.gskpharm.com) or call 1-800-807-9474.

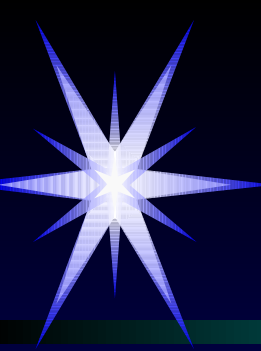


# Emergency Contraception

- Three options:
  - Combined oral contraceptive: Yuzpe Method
    - ▶ Lo-Ovral 4 pills, repeat 12 hours later
    - ▶ Preven
  - ▶ Progestin only pill
    - Plan B
  - IUD (Paragard)
    - inserted w/in 5 days

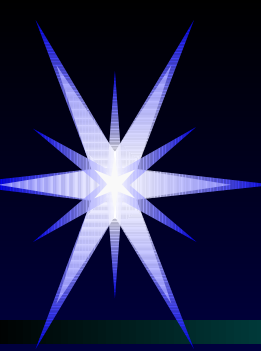


Emergency Contraception  
*Overview*  
and the  
**PREVEN™**  
Emergency Contraceptive Kit



# Emergency Contraception

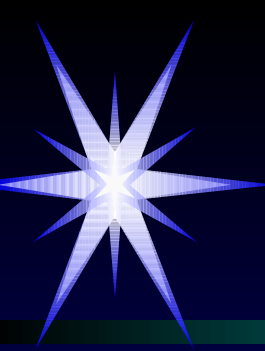
- Nausea
  - Use antiemetic before first dose
  - ▢ If  $>1$  hr from dose do not need to repeat
  - ▢ Use Plan B
- ▢ Amenorrhea: r/o pregnancy
- ▢ Pregnancy: no increase in rate of fetal anomalies



# Combined Oral Contraceptives

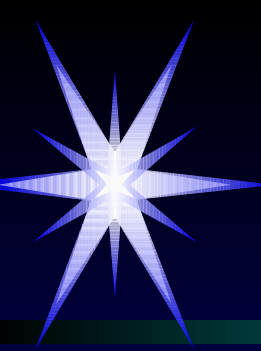
- Estrogen: cycle control
  - ethinyl estradiol: 20-50 mcg
  - ▢ mestranol: 50 mcg
    - must be converted to e.e. to be active
- ▢ Progestins: contraceptive action
  - ▢ several from which to choose
  - ▢ “third generation”
    - ▢ desogestrel, norgestimate
  - ▢ drospirenone (“Yasmin”)





# Combined Oral Contraceptives

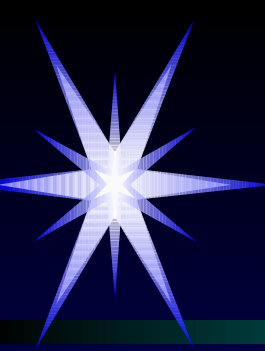
- Absence of withdrawal bleeding
  - R/O pregnancy
  - ▢ reassurance
  - ▢ switch to newer progestin or tri-phasic
- ▢ Acne
  - ▢ decrease androgen effects
  - ▢ increase estrogenic effects



# Combined Oral Contraceptives

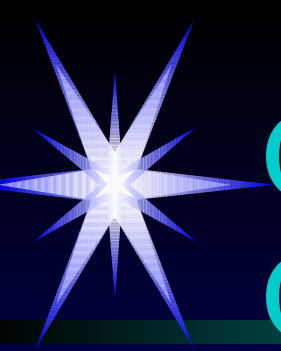
- Breakthrough bleeding
  - counsel RE: missed pills, decreases after 3 mos
- alter progestin
  - try 3rd generation
  - increase potency if midcycle bleeding
- alter estrogen
  - increase if midcycle bleeding
  - try Estrostep if bleeding precedes menses
  - try Mircette if bleeding follows menses





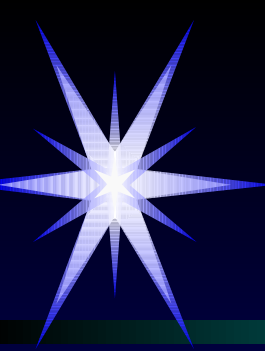
# Combined Oral Contraceptives

- Venous thromboembolic complications
  - increased risk if: >50 yrs, smoker, sedentary/overweight, HTN, diabetes, desogestrel ??
  - ▢ risk of DVT: 3/10,000
  - ▢ risk of stroke: 3/100,000
  - ▢ stop OCPs for 4 weeks if undergoing MAJOR surgery



# Combined Oral Contraceptives

- Breast cancer: slight increased risk
- ▢ Cervical cancer: slight increased risk
- ▢ Headaches: menstrual migraines
- ▢ Weight gain: no causal relationship
- ▢ Liver-inducing medications: use in combination with barrier method



# Combined Oral Contraceptives

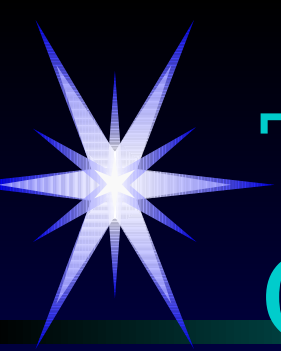
- ▶ Extended Use Oral Contraceptives
  - ▶ 63-84 active pills in a row, followed by hormone-free week (Seasonale or monophasic)
  - ▢ For women who desire fewer menstrual cycles
    - ▶ menstrual/premenstrual symptoms
    - ▢ on enzyme-inducing meds (rifampin, phenytoin)
    - ▢ heavy menstrual bleeding
  - ▢ Breakthrough bleeding: 50%

# Transdermal Contraception

*Ortho Evra*<sup>®</sup>  
(norelgestromin/ethinyl estradiol  
transdermal system)



upper torso  
(front and back  
except on your breasts)



# Transdermal Contraception

- One patch weekly for 3 weeks, followed by patch free week
- Cycle control and side effects similar to OC
- Efficacy similar to OC
- Decreased efficacy in women  $>90$  kg. but still more effective than barriers

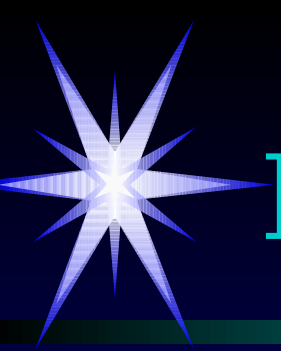
# Vaginal Ring



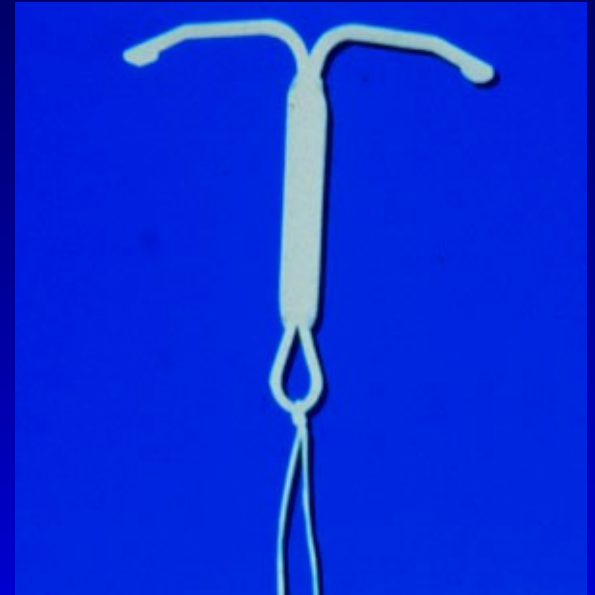
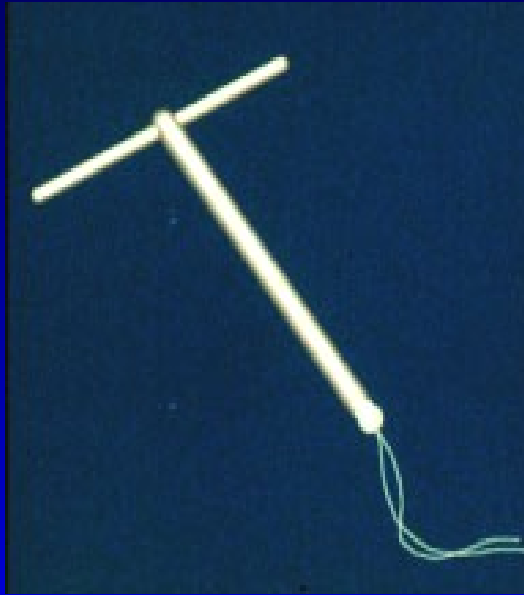
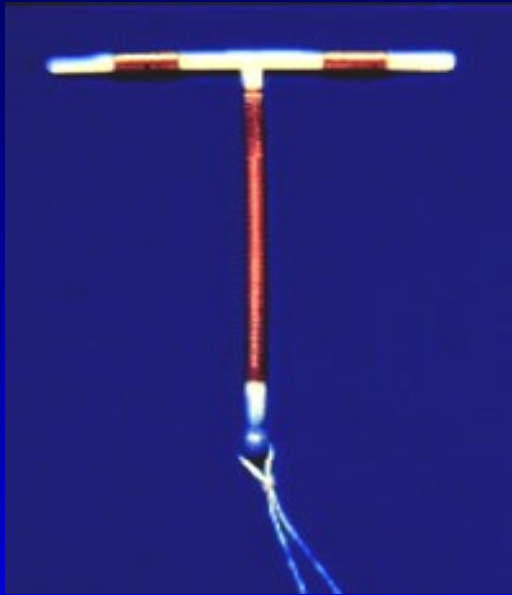


# NuvaRing

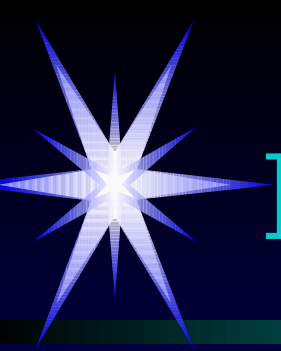
- One size fits all
- ▢ Removed after 3 weeks: reliable withdrawal bleed
- ▢ Cycle control, side effects, efficacy similar to OCs
- ▢ Contraceptive efficacy drops precipitously when ring removed



# Intrauterine Devices

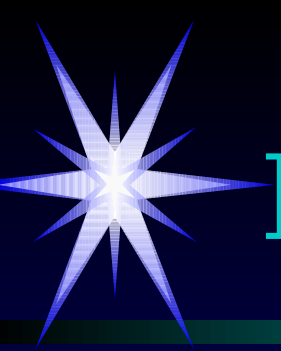






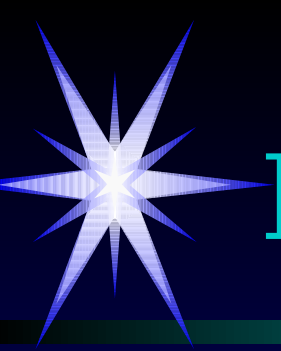
# Intrauterine Devices

- Paragard (“copper T”)
  - effective for 10 years
  - ▢ no hormones
  - ▢ toxic to sperm, inhibition of tubal transport
- ▢ Mirena (levonorgestrel)
  - ▢ effective for 5 years
  - ▢ decrease in menstrual blood loss
  - ▢ thickening of cervical mucus



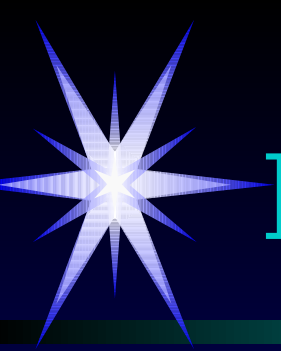
# Intrauterine Devices

- Expulsion: 2-10% in first year
  - missed period may be first sign
  - pt should regularly check for strings
- Pregnancy
  - related to high incidence of miscarriage
  - IUD should be removed immediately
  - if spontaneous or voluntary ab recommend prophylactic antibiotics (doxycycline)



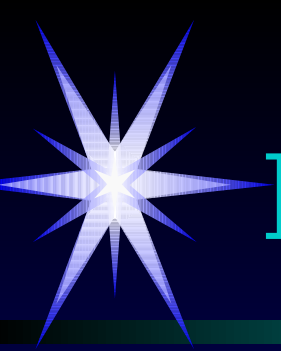
# Intrauterine Devices

- Bleeding/spotting
  - usually improves after 1st three months
  - examine for cause, including pregnancy
- menorrhagia
  - NSAIDs
  - estrogen or OCPs
- remove IUD for:
  - suspected endometritis
  - to r/o endometrial cancer



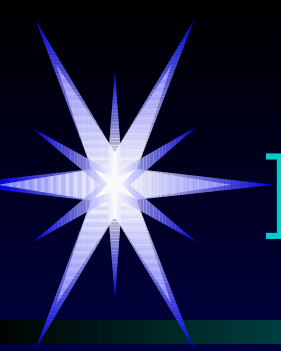
# Intrauterine Device

- PID
  - risk highest in first 20 days after insertion
  - ▢ incidence of PID NOT decreased with prophylactic antibiotics
  - ▢ if women diagnosed with PID:
    - consider hospitalization
    - ▢ treat with antibiotics
    - ▢ remove IUD
  - ▢ risk not increased in diabetics



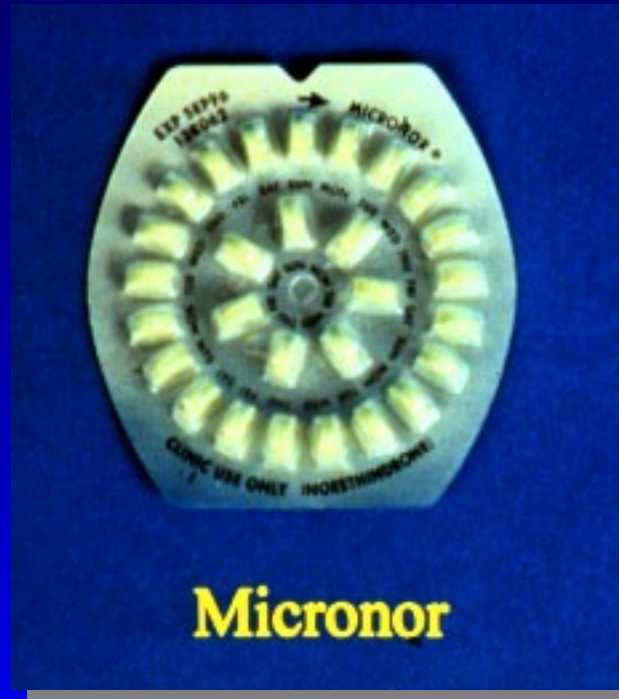
# Intrauterine Device

- Actinomyces on Pap
  - confirm diagnosis with pathologist
  - ▢ if symptoms of PID:
    - treat with doxycycline or ampicillin
    - ▢ remove IUD
    - ▢ U/S to R/O abscess
  - ▢ if asymptomatic can repeat Pap and treat if actinomyces persists



# Progestin-Only Pills

- Unforgiving of late or missed pills



# Depo-Provera

- Depot medroxyprogesterone acetate
- No dosage adjustment for weight or concomitant drugs (eg antiepileptics)
- Suppression of decrease in bone density





# Depo-Provera

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- Schedule injections every 12 weeks
- ▢ Develop protocol if patient late, eg:
  - check pregnancy test
  - ▢ use back-up contraception or abstain for 2 wks
  - ▢ repeat pregnancy test
- ▢ No known risk of fetal effects

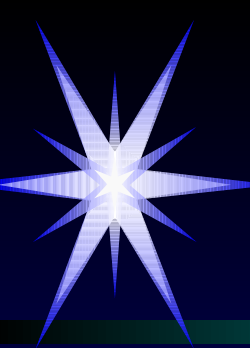




# Depo-Provera

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- Menstrual irregularities
  - most common reason to discontinue
  - cycle with estrogen or OCPs
  - NSAIDs
- Weight gain
- Delay in return of fertility



# Lunelle

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- No longer available: “problems with production”

# Norplant

